

coast of McClintock Island, Franz Joseph Land, Baldwin-Ziegler Exped., 1902, 1 specimen.

13. *METRIDIUM SENILE* (L.) var. *FIMBRIATUM*. St. Michaels, Norton Sound, Alaska, E. W. Nelson, 1879-80, low water, 3 specimens; Unalaska, Aleutian Islands, Hultén, 1932, 5 specimens (R.M.); Petropaulovsk, Kamchatka, Swedish Kamchatka Exped., 1921, 4 specimens (R.M.); Awatcha Bay, Swedish Kamchatka Exped., 1921, some small specimens (R.M.); Achomten Bay, Swedish Kamchatka Exped., 1920, 1 specimen (R.M.).

Among the specimens from Unalaska there is a small one (0.5×0.6 cm.), the nematocysts of the acontia of which are: Penicilli $47-58 \times$ about 5μ , spirulae $47-57 \times 3-3.5\mu$. In a small specimen of the variety *dianthus* of about the same size as the variety *marginatum* the penicilli of the acontia are $46-50 \times$ almost 5.5μ , the spirulae $38-50 \times 3-3.5\mu$. Thus it seems that also young specimens of *marginatum* have larger nematocysts than *dianthus* in the acontia (compare Carlgren, *The Godthaab Exped.*, 1928. Medd. om Grønland 79: 23-24. 1933.).

ZOOLOGY.—*Neodiplostomum pricei* n.sp., a new trematode from a gull, *Larus novaehollandiae*.¹ WENDELL H. KRULL, Bureau of Animal Industry. (Communicated by MAURICE C. HALL.)

The fluke described in this paper was obtained from an Australian silver gull, *Larus novaehollandiae* Stephens, which had been experimentally infected by feeding it fish, *Fundulus diaphanus diaphanus* and *F. heteroclitus macrolepidotus*, containing metacercariae of the neascus type. The species appears to be new and for it the name *Neodiplostomum pricei* is proposed.

Neodiplostomum pricei n. sp.

(Figs. 1-2)

Description.—*Neodiplostomum*: Body small, distinctly separated by constriction into a forebody and hindbody. Forebody 1.2 mm. to 1.6 mm. (average 1.4 mm.) long by 600μ to 665μ (average 632μ) wide, spoon-shaped, relatively thin and leaf-like, without glands and lateral sucking cups; hindbody 550μ to 880μ (average 748μ) long by 410μ to 520μ (average 472μ) wide, roughly cone to acorn-shaped when bursa copulatrix is withdrawn. Cuticula provided with fine spines extending from anterior end to level of holdfast organ. Oral sucker 37μ to 60μ (average 47μ) long by 30μ to 44μ (average 38μ) wide and subterminal. Mouth opening into a short prepharynx about one-third as long as pharynx. Pharynx 33μ to 53μ (average 43μ) long by 26μ to 41μ (average 33μ) wide. Esophagus twice as long as pharynx, bifurcating to form narrow, thin-walled ceca extending to near level of posterior end of posterior testis; ceca ventral in position in hindbody. Acetabulum 55μ to 92μ (average 76μ) long by 73μ to 112μ (average 91μ) wide, midway between

¹ Received April 17, 1934.

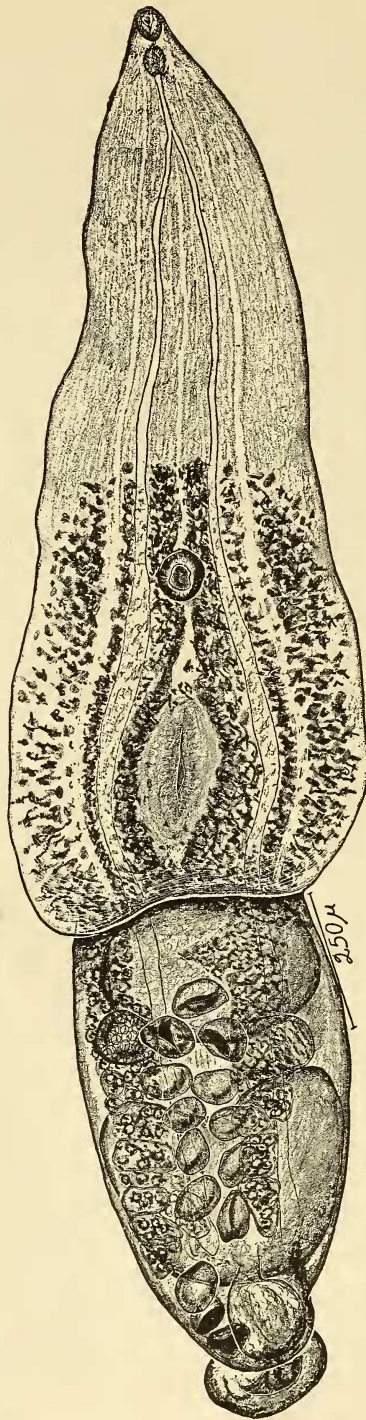


Fig. 1.—*Neodiplostomum pricei*. Entire worm.

holdfast organ and anterior end of vitelline area. Holdfast organ large, 310μ long when extended (Fig. 2b), with median longitudinal cleft when retracted. Testes large, tandem, filling greater part of hindbody; anterior testis 230μ to 318μ (average 280μ) long by 295μ to 425μ (average 387μ) wide, transversely oval; posterior testis 280μ to 360μ (average 330μ) long by 372μ to 470μ (average 435μ) wide, reniform, wider than long, somewhat larger than anterior testis. Vas deferens broad and extending to near posterior end of posterior testis, expanding there and forming a voluminous, folded seminal vesicle filled with spermatozoa, discharging into genital atrium through a

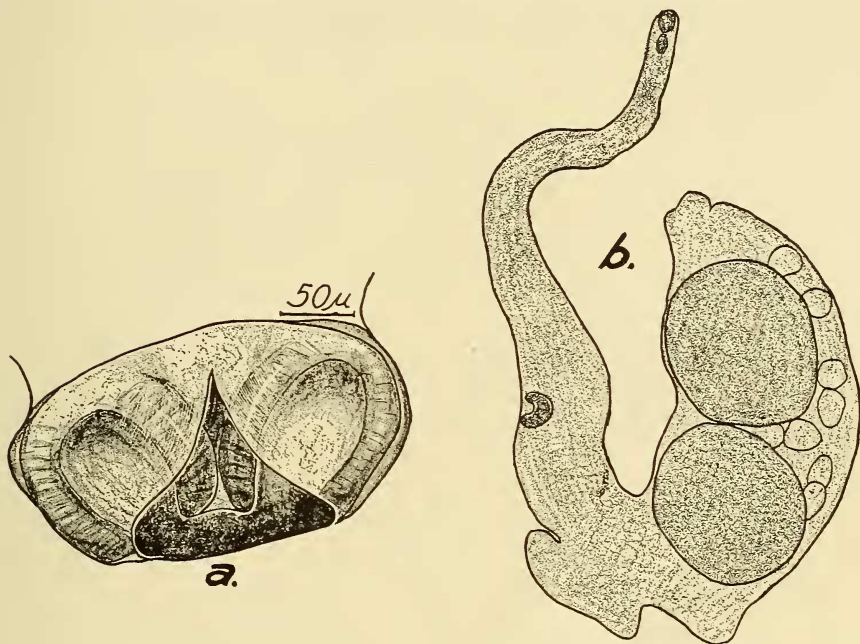


Fig. 2.—*Neodiplostomum pricei*. (a) Bursa copulatrix, expanded, dorsal view; (b), complete specimen flexed dorsally, showing expanded hold-fast organ.

short ejaculatory duct. Ovary 110μ to 140μ (average 120μ) long by 86μ to 122μ (average 104μ) wide, ventral, either to right or left of median line, at, and usually overlapping postero-lateral margin of anterior testis. Oviduct arising on postero-dorsal face of ovary, continuing in postero-dorsal direction and uniting with Laurer's canal, turning, continuing somewhat anteriorly, uniting with common vitelline duct, and then continuing as oötype. Laurer's canal opening dorsally in median line near level of posterior margin of ovary. Mehli's gland large, surrounding oötype. Uterus voluminous, with short ascending limb turning at level of anterior testis and continuing posteriorly as descending limb, extending in median line ventral to all organs except vitellaria, and terminating at genital atrium. Proximal portion of uterus usually filled with spermatozoa, and in stained and mounted specimens sometimes folded in such a way as to appear as a spherical seminal receptacle equal in size to, and opposite, ovary. Vitellaria occupying area from middle of anterior body to end of posterior testis; vitelline follicles extending dorsally and ventrally in anterior body and in portion of posterior

body in front of anterior testis, and ventrally in remaining part of posterior part of body; vitelline follicles in anterior part of body relatively small, and those in posterior part very large. Common vitelline duct with mostly a dorso-ventral course; expanded to form a vitelline reservoir. Eggs from preserved flukes averaging 86μ long by 66μ wide, those from living flukes averaging 92μ long by 72μ wide. Details of bursa copulatrix shown in figure 2a.

Host.—*Larus novaehollandiae* Stephens (experimental).

Location.—Small intestine.

Distribution.—United States (Washington, D. C.)

Type specimens.—U.S.N.M. Helm. Coll. No. 32880; *paratypes* No. 32881.

This description is based on 25 of 80 specimens recovered from a single gull. Some of the flukes were killed under pressure in corrosive acetic fixative, and some were relaxed in cold water and killed without pressure, those fixed by the latter method being of greatest value for descriptive purposes.

Neodiplostomum pricei may be distinguished from the numerous other species of the genus by the position of the ovary which is posterior and lateral to the anterior testis. In the species which have been described previously the ovary is pretesticular.

The gull, in which the experimental infection was obtained, was hatched and raised in captivity in Washington, D. C. The natural definitive host of the parasite is not known. The life history of this parasite will be given elsewhere.

ZOOLOGY.—*Two new species of Corophium from the west coast of America*.¹ CLARENCE R. SHOEMAKER, U. S. National Museum. (Communicated by MARY J. RATHBUN.)

Recently while sorting amphipod material taken by Dr. Waldo L Schmitt along the coast of Peru in 1926, I noticed an undescribed species of *Corophium* which I here designate as *Corophium baconi*.

In 1927 the Pacific Biological Laboratories sent to the United States National Museum some amphipods from Monterey Bay, California, amongst which was another species new to science which I here designate as *Corophium californianum*.

***Corophium baconi*, new species**

Figure 1

Description of male.—Head with rostrum short and broadly triangular; eye lobes broad, their front margin nearly straight and gradually passing into side margin of head by a broadly rounding curve. Antenna 1, first joint about as long as second plus half of third, lower margin with one distal spine and two about one-third from the proximal end, though the third or proximal

¹ Published by permission of the Secretary of the Smithsonian Institution. Received March 3, 1934.